(Gittelman, in preparation). Probably *Buenoa* are capable of subsisting on a variety of prey, allowing them to be effective predators on mosquito larvae while not totally depending on them for their distribution. When offered a similar selection of prey types, *M. hondurensis* ate ants struggling at the water surface before all other prey species including mosquito larvae ($P \leqslant .01$).

B. antigone is readily maintained in the laboratory but breeding under laboratory conditions has not been attempted. It is likely that these insects lay their eggs on or in plant material. In either case, eggs could be collected by harvesting plants or some artificial oviposition substrate (Toth and Chew, 1972b). Since *B. antigone* does not cannibalize even in crowded laboratory enclosures, little difficulty would be expected in mass rearing. In contrast, *M. hondurensis* would necessitate separate containers, for each individual.

The suggestion that backswimmers be used for mosquito control (Toth and Chew, 1972, Ann. Entomol. Soc. Amer. 65: 1270–79; 1972. Env. Entomol. 1: 534–5; Ellis and Borden, 1970, Ann. Entomol. Soc. Amer. 63: 963–73) seems well applied to *B. antigone* but not to *M. hondurensis*. Although both species will eat mosquito larvae, *M. hondurensis* do so at a slower rate than do *B. antigone*. In addition it would appear impractical to distribute *M. hondurensis* as a biological control agent because it tends to inhabit moving water where mosquito larvae are not prevalent. On the other hand, *B. antigone* seem to prefer mosquito larvae as food, and their microhabitats generally overlap.—STEVEN H. GITTELMAN, *Division of Biological Sciences, U-42, University of Connecticut, Storrs 06268.*

Biological observations on darkling ground beetles from western North America (Coleoptera: Tentyriidae).—*Coelosattus fortineri* Blaisdell (1927) was originally described from the Algodones Sand Dunes of California; this genus was placed in synonymy under *Eusattus* (Doyen, 1972: Quaest. Ent., 8: 357–376). *Coelomorpha maritima* Casey (1890) was originally described from "lower California." This genus was later placed in synonymy under *Coelus* (Doyen, 1972). Subsequent to their original descriptions, these beetles have remained largely unknown in collections, although both are locally abundant.

Seventy-six individuals of *Eusattus fortineri* were collected from the Algodones Dunes, 2 mi. N. Glamis, Imperial County, California, during April, 1972. Four of these were encountered on the sand surface between 1900–2300 hrs. (PST). The remainder were excavated from the sand around the bases of creosote bush (*Larrea divaricata* Cavanilles), at depths of 6–20 cm. The distribution of the beetles was highly aggregated, with 28 individuals buried beneath a single plant. A typical assemblage consisted of six to eight beetles, and only three groups of less than three individuals were discovered. Beetles were found only beneath plants with canopies close to the sand. Suitability of plants as shelters depends on the degree of shading of the sand about their bases, since exposed substrates in the Algodones Dunes reach midday temperatures well above 40°C during warm months.

E. fortineri appears to be abundant within its restricted geographic range, which coincides with the distribution of exceptionally fine sand composing the Algodones Dunes and adjacent dunes in southwestern Arizona and northwestern Mexico. Its allopatric counterpart in other areas of western North America is the morphologically similar *E. muricatus* LeConte, which occurs on a variety of

sandy substrates, including dunes, over a broad geographic area from eastern Washington to Texas and northern Mexico. It has been recorded from numerous localities within 50 mi. of the Algodones Dunes, but never in actual sympatry with *E. fortineri.*

Coelus maritima has been recorded from scattered coastal localities in northern and central Baja California, but fewer than 30 specimens were known prior to 1972. During late March, 1972 and 1973, and mid-June, 1973, approximately 500 adults of *C. maritima* were collected by screening sand at the maritime dunes at Santa Maria Beach, San Quintin Bay, Baja California Norte. In March both adults and larvae were extremely abundant to depths of 3 cm in the sand canopied by perennial plants, especially *Abronia maritima* Nuttal ex Watson, where they were associated with small numbers of other tenebrionids *Cryptadius inflatus* LeConte, *Eusattus laevis* LeConte, *E. erosus* Horn, and *Micromes ovipennis* (Horn). In June only adults were encountered, many teneral, suggesting that adult emergence peaks in late spring or early summer.

The local abundance of *C. maritima* is probably conditioned by the characteristics of the sand in which it lives. The beach sand at San Quintin Bay is extremely fine and friable, allowing entry by small organisms such as *Coelus.* South of San Quintin, the dunes extend inland a distance of 3–4 miles, but the sand becomes progressively coarser and more consolidated inland. Collections away from the immediate coast contained no *Coelus*, but the larger species, *E. laevis* was present, and *Micromes* was abundant on the sand surface beneath plants. In extreme northern Baja California, *C. maritima* is replaced by *C. globosus* LeConte, which occurs in the same habitat. In extensive collections from dunes near Cantamar, 25 mi. S. Tijuana, *C. globosus* was very abundant, while *C. maritima* was absent, and the two species do not appear to occur sympatrically. JOHN T. DOYEN, *Division of Entomology and Parasitology, University of California, Berkeley 94720.*

Differential predation of darkling ground beetles (Coleoptera: Tenebrionidae) by the Channel Islands Fox.—During April, 1972, 73 scats of the Channel Islands Fox (*Urocygon littoralis*) were collected from the sand dunes near Wilson's Cove on the northwestern end of San Clemente Island, Los Angeles County, California. The diet of the fox is known to be extremely varied, including berries, acorns, and carrion, as well as living invertebrates and small vertebrates (von Blocker, 1967, *in* Philbrick, Proceedings of the Symposium on the Biology of the California Islands, pp. 245–253). All of these items were represented by the fragments recovered from the San Clemente scats, but insect remains were particularly abundant. What is of interest is the relative numbers of some of the beetle prey (Table 1). By far the most abundant were corpses of *Trigonoscuta* sp. (Curculionidae), June beetles (Scarabaeidae), and the tenebrionids *Coelus remotus* Fall and *Eusattus robustus* LeConte. All these species are relatively abundant on or about the sand dunes, but two of them (*Trigonoscuta* and *Coelus*) are relatively small bodied. Large numbers would be required to sustain an animal as large as a fox. The large tenebrionid *Eleodes laticollis* LeConte is also abundant at Wilson's Cove, but was rare in the scats. Three other small tenebrionids, *Apsena grossa* LeConte, *Coniontis latus* LeConte, and *Helops bachei* LeConte were also uncommon in the scats, though relatively abundant on or about the dunes. With